



TITLE OF INVENTION

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title-Bedford Quilting Rack

CROSS - REFERENCE TO RELATED APPLICATIONS

" Not Applicable "

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

" Not Applicable "

REFERENCE TO SEQUENCE LISTING, A TABLE, OR COMPUTER PROGRAM LISTING COMPACT DISC APPENDIX

" Not Applicable "

BACKGROUND OF THE INVENTION

This invention is a device that holds cloth material in a frame in a taunt position for the quilting process or needle point.

Prior quilting frames are difficult and time consuming to set up.

We can use some improvement in this area, And I believe my invention will solve those problems.

BRIEF SUMMARY OF THE INVENTION

The reason for invention was, to simplify the way to hold a quilt in a square quilting rack, it also holds the quilt better, and it is quicker and easier to load the quilt in quilting rack.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

Fig. No. (1) Assembly view of quilting rack and stand.

Fig. No. (2) Top assembly view of quilting rack and clamp frame.

Fig. No. (3) A blown up view of section A-A, from Fig. (2) to show mechanics of quilt rack clamp frame.

Fig. No. (4) A blown up view of section B-B from Fig. (2) to show mechanics of quilt rack clamp frame..

Fig. No. (5) Detail drawing of (1) section of (4) to make quilting rack clamp frame, with Fig. No.(5A) showing top view ,and Fig. No.(5B) showing side view, and Fig. No.(5C) showing end view.

Fig. No. (6) Detail drawing of clamp bar, with Fig. No.(6A) showing top view, Fig. No.(6B) showing side view, and Fig. No.(6C) showing end view.,

Fig. No. (7) Detail drawing of (1) section of (4) to make quilting rack frame, with Fig. No.(7A) showing top view, Fig. No.(7B) showing side view, and Fig. No.(7C) showing end view.

Fig. No. (8) Detail drawing of quilting rack frame support, with Fig. No.(8A) showing top view,and Fig. No.(8B) showing side view.

Fig. No. (9) Detail drawing of frame support arm, with Fig. No.(9A) showing top view,and Fig. No.(9B) showing side view.

Fig. No. (10) Detail drawing of frame support arm base, with Fig. No.(10A) showing top view,and Fig. No.(10B) showing side view.

Fig. No. (11) Detail drawing of frame post swivel retainer, with Fig. No. (11A) showing top view,and Fig. No.(11B) showing side view.

Fig. No. (12) Detail drawing of frame post swivel, with Fig. No.(12A) showing top view,and Fig. No.(12B) showing side view.

Fig. No. (13) Detail drawing of frame post, with Fig. No.(13A) showing top view, and Fig. No.(13B) showing front view.

Fig. No. (14) Detail drawing of frame base, with Fig. No.(14A) showing top view, and Fig. No.(14B) showing front view.

Fig. No. (15) detail drawing of frame legs, with Fig. No.(15A) showing top view, and Fig. No.(15B) showing side view

Fig. No. (16) From sheet no. (4) is a detail drawing of clamp frame stops, with Fig. No.(16A) showing top view, and Fig. No.(16B) showing front view.

DETAILED DESCRIPTION OF THE INVENTION

(0001) The quilting rack is a device used to hold fabric, such as a quilt taut during hand quilting process.

(0002) The quilting rack is made of wood in a home wood shop, and has some metal hardware, like bolts, nuts, wood screws and springs.

(0003) The unique feature of this quilting rack is, the way it holds the fabric or quilt. It is different from other quilting racks that hold fabric with a band clamping around a frame. The new idea is, the spring loaded clamp bars that will hold the quilt in place. In the drawings on sheet number (2) there is a view of a quilting rack frame and a quilting rack clamp frame. First lay the quilt over the frame, and place the clamp frame on top of the quilt, and push down over the quilt, the spring loaded bars will retract keeping pressure on the quilt, holding it in place. It holds the quilt better, and it is easier to load the quilt in the quilting rack.

(0004) Fig. 1 shows various views of adjustment on the quilting rack stand.

(0005) Referring to Fig. 1, (20) is an assembly view of the present invention.

(20) is comprised of (21) a quilting rack frame, (22) a clamp frame, and (23) clamp frame stops. It also includes the stand that is made out of wood, and has various components from (24) TO (35) that will be discussed in detail below.

(0006) The quilting rack frame (21) is made out of four pieces of wood, equal in size and length, that are glued and screwed together at the corners to make the quilting rack frame (21) that supports the material. The rack frame support (24) is fastened to frame (21) with wood screws.

(0007) Quilting rack clamp frame (22) is also made of four pieces of wood, equal in size and length, that are glued and screwed together at the corners to make the clamp frame (22). Each of the four pieces have been hollowed out to accept (36) clamp bars and (37) springs, ref. Fig. 3 section A—A of the drawings. The reason for the clamp frame with spring loaded clamp bars is to keep pressure on the material to hold it in place while quilting. There are four bars (36) to each clamp frame, one on each side, they are made of wood and held in the clamp frame (22) by hanger bolts that are screwed into the wooden bar (36), and held in clamp frame (22) by washer (39) and nut (38). ref. Fig 4. section B—B, of the drawings.

(0008) The frame supports (24) are made of wood and are fastened to support arms (26) with 5/16 carriage bolts and bar knob (25), you can loosen bar knob (25) and adjust the frame (21) to the desired angle you want, then retighten bar knob (25) to hold in place.

(0009) The support arms (26) are pressed into slots of support arm base (28), shown in Fig. 10 and held in place with a wood screw.

(0010) The support arm base (28) is attached to frame post swivel (29) with a 3/8 hanger bolt and bar knob (27), the hanger bolt is screwed into the post swivel (29), the opposite end of hanger bolt has a 3/8-16 thread that protrudes out far enough for support arm base (28) to slide over hanger bolt and be held in place with bar knob (27), this allows you to loosen bar knob (27) and swivel quilting frame 360 degrees, and tighten down in the desired position.

(0011) The frame post (31)&(32) is made up of three pieces, two of post swivel retainer (31), and one frame post (32). The two swivel retainers (31) are mounted on opposite sides of post (32) with wood screws, which creates a

clevis shape to accept the radius end of post swivel (29). a 3/8 carriage bolt is inserted through swivel retainer (31) and post swivel (29) and fastened with 3/8 bar knob (30), which allows you to loosen bar knob (30) to adjust quilting frame (21) up and down to the desired height.

(0012) The frame post (32) is fastened to frame base (33) with two 3/8 lag screws coming up from the bottom of frame base (33) into the frame post (32).

(0013) the two legs (34) are fastened to base (33) with 5/16 hanger bolts and wing nuts (35). the 5/16 hanger bolts are screwed into legs (34). the opposite end of the hanger bolt has a 5/16-18 thread that extends thru base (33) and fastens with a 5/16 wing nuts. the base (33) has two slots for the legs, shown in Fig 14, for the legs to nest in, and to keep them in place, and also allows you to swing the legs (34) in for storage.